WASHINGTON CITY SIDELIGHTS

Bugs to Cost Uncle Sam $800,000 in Year 1915

WASHINGTON.—Bugs! Bugs that fly and bugs that burrow, bugs that bite and bugs that sting, big bugs and tiny bugs, ladybugs, and bugs anything but ladylike, are going to cost the federal government $800,000 during the fiscal year of 1915. That is the amount carried in the agricultural bill before congress. Dr. L. O. Howard, chief of the bureau of entomology and Uncle Sam's champion bug hunter, has pointed out, however, that these insects will cost the country fully 100 times that amount in cotton destroyed; corn and wheat and other grain crops injured; forests devastated; root crops ruined and fields laid almost bare. It is to stop such ravages as these that the bureau is maintained. That it saves many times its cost every year is demonstrated easily by statistics.

The biggest bug from the standpoint of destructiveness is the boll weevil, which is slowly but certainly retreating before the attacks of government scientists. But the "sinews of war" provided by the appropriation bill also are wanted for campaigns against the gipsy moth, which attacks tree foliage; the horn worm, that destroys tobacco plants; the cane insect that lays low cane fields; the alfalfa weevil, which attacks that crop; the cinch bug, that sucks the life from wheat and cornstalks; the codling moth, that spoils tree fruits; the pine beetle, and the bark beetle. The latter insect is a serious menace to the national and private forests, because it destroys millions of feet of standing timber.

"We have undertaken an extensive study of the house fly," said Dr. Howard. "In the small farm and village 99 per cent of the house flies are bred in stable refuse, and we have been co-operating with the bureau of chemistry to find some substance that will kill the larvae and not impair the fertilizing value of the refuse. We have found recently that there are one or two such substances which may be used at an economical rate. I think we are on the verge of a practical discovery which will be of great value in the way of reducing the house fly pest.

"We have several lines of work now going on in regard to the effect of insects on the health of man and animals. We wish, in the first place, to complete the records of longevity of the cattle ticks. Then, as to stable flies: This insect has been shown to be instrumental in the carriage of infantile paralysis. We also expect to undertake a series of malarial fever studies and the bionomics of malarial mosquitoes, in order to provide remedies for the requirements of plantations, especially in the Mississippi delta, where malaria is rife."

Thought He Read From Congressional Record

EVERY one who has read "Chimmie Fadden" knows "Ned" Townsend, the author, and now representing a district in northern New Jersey. So much for the introduction. "Ned" Townsend had to make a speech in Newark the other day, and as he had some serious thoughts to impart, he went to the trouble of writing out a portion of the things he really wanted to deliver to that after-dinner audience. When he reached Newark a reporter for the Call spotted him and asked him if he had an advance copy of the stuff he was about to get off his chest.

"I have this bunch of notes," said Townsend, "and that is all."

The reporter said he could take the notes to the office, have them set up in type and promised to send a proof of the remarks back to Townsend in plenty of time for dinner. All of which he did.

Mr. Townsend arose in his appointed time, and after delivering himself of the usual introductory remarks, said that as he had a serious purpose in mind he would like permission to read some of the things he had written on the train going north. And he pulled out the proof.

The next speaker was a bank examiner. He started off something like this:

"Gentlemen, you have been imposed upon. You have heard Mr. Townsend say that he wrote out his speech on the train, but I have been watching him every minute and I tell you upon my word of honor that he did not read from a written manuscript at all. He read from the Congressional Record."

Whereupon every one laughed. Townsend can tell that story to men who know the speed with which newspaper proofs are "pulled" after the "copy" goes into the composing room, but it would never have done to try to explain at a dinner that he read from the proof of a speech he had handed to a newspaper reporter only an hour or two previous. No, indeed. The ordinary idea of a piece of proof brings up visions of careful writing, long dickering with a printer, seeing a first proof, waiting three days for a corrected proof, and then finding an error perhaps in the "corrected" proof.

No. It won't do. The people at that dinner probably firmly believe that Ned Townsend worked a week or a month on that speech.

Negro Used for Mosquito Bait in Canal Zone

COL. WILLIAM L. SIBERT, U. S. A., builder of the Gatun locks, the Gatun dam, the breakwater at Colon harbor, and the excavation of the channel between the Gatun locks and the Atlantic ocean, has written an interesting article on the Panama canal, his first contribution on the subject, for the National Geographic society. In his article, Colonel Sibert humorously writes of the effort to rid the Canal Zone of mosquitoes.

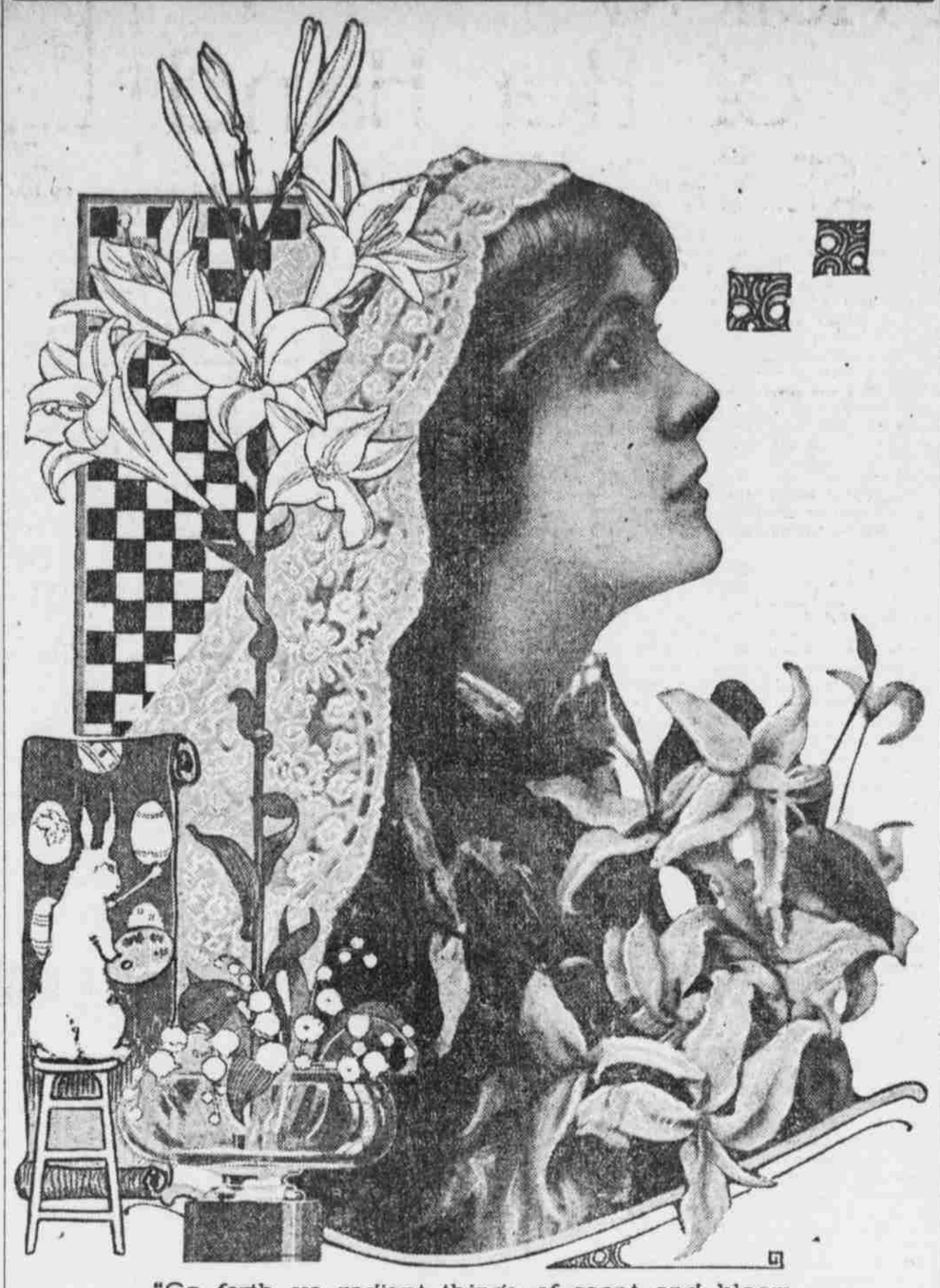
"In 1912 Gatun had probably the greatest influx of malarial mosquitoes in its history," he writes. "The sanitary department determined to locate all the breeding places of mosquitoes near Gatun, catch mosquitoes at each place, and after painting them turn them loose, and determine from the color of the mosquitoes caught in Gatun from what point they came. I went down there one morning to see how they were caught and painted. Mosquito bars were suspended from limbs tied up at the bottom. They had thousands of mosquitoes in them ready to be sprayed with a colored liquid, and the sanitary inspector was asked how he caught them. He said, 'We have a more scientific way, but this had to be done in a hurry. We simply let the mosquito bar down, as you would open a bed, left one side of it open, and put a Jamaica negro in there for bait.' As soon as the mosquito bar was full the bait was removed and the end tied up. I saw a Jamaica negro standing there. 'John, were you the bait in that bar?' I asked, and he replied, 'Yes, boss; that is the easiest money I ever earned—10 cents an hour for sitting there and doing nothing but just inviting the mosquitoes in.'"

No Secret in the Manufacture of Money Paper

THERE is an erroneous idea, very generally held, that paper money is printed on paper manufactured by a secret process, which is carefully guarded from the public. The truth is that almost any paper house could make the identical paper, were it not prohibited by law from doing so. The matter of getting the silk fiber into the fabric is comparatively simple, and the appearance, of these tiny shreds, often cleverly imitated with a fine pen, not infrequently induces the inexperienced to accept a counterfeit bill of which they are suspicious. With the development of photo-engraving the shady art of counterfeiting received a big impetus. Prior to that industry only experts could hope to produce bills that would pass even casual inspection. And as man's handiwork always expresses his individuality, the "thumb print" of every counterfeiter was literally on every bill he put out. Today, however, bills may be duplicated by a purely mechanical process; but the lines are heavy and uneven, and, while such a reproduction may get by an inexperienced clerk, the expert can spot it at a glance.

Despite the fact that the paper on which our money is printed is so easily duplicated, secret service men say there is not more than $4 in $300,000 that are counterfeits, and that in silver there will be three bad dollars in every 100,000. It is not a little odd that counterfeit dollars are a peculiar sort of fraud on the government, for the counterfeit dollars are very apt to contain more silver than the real dollar, and they weigh more, and that is usually how they can be detected. Counterfeiters can make silver dollars out of almost pure silver and yet make money on them.

"With Lilies and Sweet Flowers"



"Go forth ye radiant things of scent and bloom
Who know not toil or spinning—
Brighten with life My risen Son's cleft tomb
The Easter triumph winning!"

All Turn to Jerusalem

Sacred Scenes of Crucifixion and Resurrection Attract Pilgrims in Thousands at Easter Time

TYPICAL of the passing of winter gloom and of the coming of summer splendor, that was Easter from the beginning, the very embryo of nature study, the spontaneous expression of man's delight in the ever joyful and beautiful annual miracle of the springtime. "A thousand hills" in verdure clad, rare valleys spangled with wee wildlings, nurtured in nature's endless chain of gardens; vast forests putting on robes of spring and those trees which in their fruition offer feasts to humanity, first holding out their flowery offerings to their deities; flawless skies with cloudlets by way of making the blue dome more radiant—that was the world's pagan springtime up to that springtime of springtimes, that Sunday of Sundays, which we now celebrate as the chief festival of the resurrection of Christ and of the Christian era.

Easter! glorious Easter! Herald of nature's year, symbol of life eternal! Upon Easter all the Christian churches the wide world over hold commemorative services. Millions of voices are raised in praise; millions of heads are bowed in worship.

In the primitive church it was one of the special days for baptism. The Latin name of the Octave, or the following Sunday, Dominicus in albis, preserves the memory of the custom of the newly-baptized, wearing their white robes throughout the entire Week. Russian Christians, who now make pilgrimages to the Holy Land, however poor they may be, and however much they may need the room for food and extra clothing, carry with them one precious parcel which contains the white robe for the baptism in the Jordan, to which they go after celebrating Easter in Jerusalem. After this baptism the robe is never put on again until it serves as a shroud. Going down to Jericho from Jerusalem and returning two or three companies of pilgrims will be met, thousands of them in each group, walking single file as a rule, though some of them ride on donkeys. In the distance they look like ants winding round and round the mountain roads, the blackness of the little line showing all the clearer from afar, because there are no other living things, animal or vegetable, to break the wild and awful mountainous monotony of the clayey and chalky limestone chasms and precipices.

However, compelling in interest other parts of Palestine may be at Easter, the thoughts of the Christian world, as well as the steps of pilgrims, turn Jerusalemward. And of all the places of overwhelming interest in Jerusalem those connected with the crucifixion and the resurrection are of the most vital and compelling interest. The various sects have shed blood following their arguments over sacred matters hereabouts, but, according to the guide-book, the Church of the Holy Sepulcher covers the traditional spot of both. Reached through narrow, crooked, none too clean streets, this church fills the visitor with mingled emotions. Squatting on the stone-paved space before the south

Traditional Tomb of Christ in the Church of the Holy Sepulcher.

entrance are sellers of beads, evil eyes and various souvenirs made of olive wood.

Once inside, one finds armed Moslem custodians, who are necessary to keep the peace between the jealous Christian pilgrims from various parts of the world, some of them half-starved fanatics, who have sacrificed everything except life itself to get there. And here one finds hanging any number of beautiful metal lamps. The Greeks are allowed a certain number, the Armenians so many, and so on.

Almost as soon as the guard is passed the large "Stone of Anointment" is reached. On this the body of Jesus is said to have lain when it was anointed by Nicodemus. The principal part of this building is the rotunda of the sepulcher. The chapel of the sepulcher is about six feet each way, and very low, 43 precious lamps hanging from the ceiling. It is here on the split marble slab, which serves as an altar, that the members of the Catholic church (Latin, Greek, Armenian chiefly), or their friends, have blessed rosaries and crucifixes. It is entered through the vestibule called the Angels' chapel. The vast and dim church is explored by the painstaking visitor with guide, lamp and opera glasses. It varies from the finished, marble-faced and much decorated parts to others that suggest dusty store rooms in neglected attics.

In 1894 the site known as the Garden Tomb was purchased for $10,000 by Church of England people, this body believing it to be the site of the entombment. It is a beautiful spot with quantities of fragrant rosemary wands forever swaying along with the rosy-fruited racemes of the pepper trees. It is very near to Gordon's Calvary, which is best seen from the entrance to Solomon's quarries; though just outside the Damascus gate, these quarries extend under the city to a distance of 700 feet. One authority says that from them enough marble was taken to build ten cities the size of Jerusalem. No wonder "not a sound was heard," since all the cutting was done before the stones were taken out.

Easter Fancies and Sentiment.

Of course we are not superstitious in these enlightened days; but there are certain little fancies that have been handed down to us that we observe "just for fun," and many of these have to do with Easter. For instance, whoever would think of allowing Easter Sunday to pass without having eaten three eggs, or having provided "three new things" to wear? Doesn't every one feel a little thrill of gladness or sadness on Easter morn, according as the sun is shining or the clouds are heavy, as indication that the year to come is to be a generally prosperous or dull one, as the case may be?

There used to be a good deal of superstition attached to the giving and receiving of Easter gifts, but that has practically disappeared, and while flowers remain the most appropriate offering, one may present anything that seems desirable, from a pair of gloves or a box of handkerchiefs to a handsome piece of jewelry. There seems to be, however, a tacit understanding that the Easter gift shall be peculiarly appropriate to the recipient, something especially desired, if it is not at the same time symbolic of the season.

The Reason.

But why does the civilized world celebrate this, the principal feast of the Christian era?

First, because the resurrection of Jesus Christ from the dead confirmed the claims of his life; and, second, because through countless ages that the world has lasted not a single message has been brought back to us from the grave but one—the one that he brought to us on this day.

When the stone was rolled back from the sepulchre door and Christ arose, the world for the first time was assured of the absolute certainty of a life beyond the grave.

"Why Weepest Thou."

Wherever grief walks lonely in its garden, an upward glance again reveals him, and there comes again the gentle question, like a soft touch on the heart's door to invite confession. Why should any one go uncomforted? To every one who grieves or suffers, the tender Lord stands as close today as he did to Mary on that first Easter morning. And to one who really takes the comfort that is offered, there is ever after, no one hour or day of comfort only, but a year-long Easter.

Glorious Easter Message.

How it changes the outlook on life, this Easter message! How differently we look upon the inhumanities of this life, the unfairness, the indignity, the sorrow of it all. It is for such a tiny part of our life! Just the schooling period! All the evidence shows there will be a balancing of accounts and a better state of things for those who wish for it, on the other side of the grave.

HOME MIXING OF FERTILIZERS IS SIMPLE AND MAY BE ECONOMICAL

Farmer First Must Understand Needs of Soil to be Treated and Requirements of Crop to be Grown—Results Often Depend on Condition of Components

(Geo. Roberts, Agronomist, Kentucky Agricultural Experiment Station.)

The question is frequently asked of the Experiment Station, can fertilizers be properly mixed at home, and if so, what advantage is to be gained by home mixing?

In answer to the first part of the question, there is no doubt that fertilizers may be well mixed at home, provided the materials used are obtained in good mechanical condition. Most of them come in good condition, such as bone meal, tankage, acid phosphate, and dried blood. Some of them may come in a hard lumpy condition, such as sulfate of potash, muriate of potash and nitrate of soda. These latter materials could be bought under specifications requiring good mechanical condition, which could be produced by regrinding, if necessary.

There are small machines now made for grinding and mixing fertilizers, some small enough to be operated by hand, when only mixing is to be done. Home mixing can be more economically done by a group of farmers buying together their materials in carload lots direct from the producer or wholesale dealer, and using a small power mixer. Yet an individual may make large savings by mixing on a floor with a shovel.

Process Is Simple.

There is no difficulty in thoroughly mixing fertilizers with a shovel, as has been repeatedly shown. Concrete requires more thorough mixing than fertilizers and is more difficult to mix. Yet most of it is done with shovels.

After having decided upon the formula to be used, the process is very simple. A tight floor of convenient size is required. Put down the bulkiest material first in a layer of uniform thickness, following with the others in the order of their bulk. Begin at one end of the pile and shovel the materials back, turning and mixing each shovelful as much as possible. Repeat the operation until an even mixture is secured.

No filler need be used, and one need not worry about the percentage formula. The proper basis for making a formula is to determine how much nitrogen, phosphoric acid and potash are desired per acre, and to use enough materials to give these amounts. The Experiment Station will furnish literature giving the composition of the various fertilizing materials.

For example, suppose a farmer wishes to use a fertilizer which would supply the full amount of the above-named elements contained in 1,000 pounds of tobacco, including the whole plant, namely, 32 pounds of nitrogen, 8 pounds of phosphoric acid and 44 pounds of potash. This would require

50 pounds of 16 per cent acid phosphate.

206 pounds nitrate of soda, or 275 pounds of dried blood.

90 pounds of sulfate of potash.

This is used merely for illustrative purposes, as one would hardly use such a formula in a soil deficient in phosphorus, as most Kentucky soils are except in the Bluegrass region. When the soil is deficient in phosphorus a larger amount of the acid phosphate should be used in such a mixture, any not less than 200 pounds. In the central Bluegrass region the acid phosphate may well be entirely dispensed with. This shows the necessity for understanding one's soil as well as the crop he wishes to grow.

Question of Saving.

As to the second part of the question, What advantage is to be gained by home mixing? the answer is, none, if the farmer can get the kind of mixture he wants at a reasonable price, for manufacturers with large, well equipped plants can mix fertilizers at minimum expense. The cost of mixing is a small item, being less than $1 per ton. But do they furnish mixed fertilizers as cheaply as the farmer can mix them for himself? In 1909 the writer made an extended investigation of the selling price of fertilizers of different grades offered on Kentucky retail markets. The most common fertilizer on the market was what is called 2-8-2 formula, which means 1.65 per cent of nitrogen (which is equivalent to 2 per cent aramonia) 8 per cent of phosphoric acid and 2 per cent of potash. The average selling price of this fertilizer at the time of the investigation was $26.81 per ton. But it was found selling as high as $30 per ton.

The following amount of materials would be required to furnish the plant food contained in a ton of this composition:

1,143 lbs. of 14 per cent acid phosphate worth	$ 8.00
215 lbs. of nitrate of soda	6.45
84 lbs. of sulfate of potash worth	2.30
1,442 lbs of materials worth	$16.75

These prices are based upon $14 per ton for 14 per cent acid phosphate, $60 per ton for nitrate of soda, and $55 for sulfate of potash, which are retail prices for these materials, but they may be bought at lower rates in larger quantities from wholesale dealers or manufacturers.

What worries some farmers is that the materials used do not weigh a ton. This is nothing to worry about. They contain the same amount of plant food as the ton of 2-8-2 mixture, and bags, freight and hauling are saved on 568 pounds in a ton, a saving on these items of 28 per cent.

Another very interesting study was the selling price of mixtures of acid phosphate and potash. These are mixtures of two very simple materials, acid phophate and sulfate or muriate of potash.

It was found that the average composition of these mixtures was 10 per cent of available phosphoric acid and 2.83 per cent of potash, and that the average selling price was $22.30 per ton.

1,430 pounds of 14 per cent acid phosphate and 120 pounds of sulfate of potash would give the amount of phosphoric acid and potash in a ton of the average composition named, and could be purchased for about $13.30. The cost of mixing should certainly not be more than $1.00 per ton.

Limestone Good Filler.

If a filler is desired, limestone ground to pass a seive of ten meshes to the inch may be used and it will have a beneficial effect on the availability of the acid phosphate used in the mixture, but there is little danger of first-class materials getting in poor mechanical condition after being mixed.

The only object in mixing fertilizers is to save time in application. The writer's opinion is that mixed fertilizers should be used only in a limited way for the purpose of "stimulating" the crop, or giving it a good "start." If the soil is deficient in phosphorus large quantities of phosphate of some form should be used broadcast and well worked into the soil. The same statement may be made for potash. Nitrogen should be obtained by the growing of legumes. Nitrogen used in mixed fertilizers with fall sown crops is of little effect. It is better to use some soluble form of nitrogen, such as nitrate of soda or sulfate of ammonia, as a top dressing, when spring growth begins.

Readers are referred to Bulletin No. 140 of the Kentucky Experiment Station. Literature on soil fertility will be furnished upon application to the Station.

KEEP RATS AND MICE OUT OF CORN CRIBS

(E. J. Kinney, Assistant Agronomist, Kentucky Experiment Station.)

It would be very interesting to know the actual number of bushels of corn that are destroyed by rats and mice in Kentucky each year. Every farmer who keeps corn in cribs, however, knows that the loss is very heavy.

Undoubtedly the most effective cribs are the all metal cribs, which are manufactured by several firms in the United States. There is no possible chance with these cribs of rats or mice gaining an entrance unless the door has been accidentally left open. These cribs are very desirable but quite expensive. The common method of making cribs rat and mouse proof and one which is followed by careful farmers, is to elevate the crib on posts so that the rodents will have difficulty in obtaining a foothold to gnaw through the crib floor. These posts may be of wood, or ordinary sewer pipe filled with concrete. These concrete filled pipes should be rested on concrete foundations with the flange end down.

After a sow has passed through the cholera, keep her, for she is immune thereafter and her pigs are not so likely to contract the disease.

POTATO PLANTING TIME

(T. R. Bryant, Superintendent Agricultural Extension, Kentucky Agricultural Experiment Station.)

It will soon be time to plant potatoes. Some say that Irish potatoes should be planted on St. Patrick's day, but whether we are able to get them in that early or not it would be well to look into the matter of good seed at once. This is especially important this season on account of the great prevalence of potato diseases that infested Kentucky last summer.

Seed should have been selected at digging time and crated during the winter, but if you did not do this and do not intend to buy seed, go over those on hand, selecting only the smooth, firm, sound tubers of good shape, discarding those that show any signs of rot or that have been very near an affected tuber. Do not dare to plant potatoes in ground that was in potatoes last season and that developed any kind of disease, as it is almost sure to recur.

There is probably little difference in merits between the northern grown seed and the home grown second crop. A good plan is to buy seed of either of these kinds every other year and save seed from this crop for the following year. A better plan is to grow a second crop for seed each year.

HANDLE THE EGGS CAREFULLY.

Too much care can not be taken in handling eggs that are to be used for hatching. W. A. Lippincott, professor of poultry husbandry at the Kansas Agricultural college, says the low per cent of the hatch of the incubator is often due to the lack of care in handling the machine. If the eggs must be kept any length of time, they should be kept at a temperature of 65 degrees. A higher temperature will start the eggs to hatching. The eggs should be disinfected in alcohol before being placed in the incubator.

BREEDING STOCK REQUIRED.

Don't expect to raise profitable chicks without vigorous breeding stock. Like begets like, and only birds of vigorous constitutions should be allowed in the breeding pen. These will give you chicks that will grow rapidly and steadily and make a prime quality fowl whether used for laying stock or market.

Marketing the products of the farm is of equal importance as their production.